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Thailand

Sugar

Annual

2004

Approved by:
Rodrick McSherry, Agricultural Counselor
U.S. Embassy, Bangkok

Prepared by:
Ponnarong Prasertsri, Agricultural Specialist

Report Highlights:
My 2005 cane production will likely continue to decline slightly due to unattractive returns, as the Royal Thai Government (RTG) is restricting the price supports. As a result, exportable supplies of sugar will likely be limited. The RTG is beginning to focus more on cane-based ethanol, but the policy remains under development.

Includes PSD Changes: Yes
Includes Trade Matrix: Yes
Annual Report
Bangkok [TH1]
[TH]

Executive Summary

MY 2005 sugarcane production will likely take a downward turn in anticipation of unattractive returns, and due to RTG policy to limit cane production.

MY 2004 cane production is revised downward to 66 million metric tons, due to dry weather conditions, which led to a sharp reduction in sugar production. However, sugar yields improved significantly due to a smaller proportion of burned cane. Also, despite an anticipated lower exportable supply, sugar exports are forecast to increase further from the previous year's anticipated record level, as other major world cane producers are hit by drought.

The change in RTG policy on sugarcane support is pushed by the huge debt burden of the state-run Cane and Sugar Fund. RTG support continues, but is limited to 65 million tons of cane produced. Meanwhile, the government has liberalized the ethanol industry in order to support the use of cane for ethanol production. This policy is new and not fully formed, with aspects of its implementation yet to be determined.

1. Sugarcane

PSD Table

Country Thailand

Commodity Sugar Cane for Centrifugal

(1000 HA)(1000 MT)

	2003 Revised		2004 Estimate		2005 Forecast	
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		12/2002		12/2003		12/2004
Area Planted	995	1144	995	1200	0	1050
Area Harvested	970	1121	970	1050	0	1020
Production	69000	74100	69000	66000	0	65000
TOTAL SUPPLY	69000	74100	69000	66000	0	65000
Utilization for Sugar	69000	74100	69000	66000	0	65000
Utilizatn for Alcohol	0	0	0	0	0	0
TOTAL UTILIZATION	69000	74100	69000	66000	0	65000

1.1 Production

MY 2005 sugarcane production will likely continue the recent downward trend, due mainly to anticipated unattractive returns, as the RTG has begun limiting the price support program, paying support only for the first 65.0 million tons of cane production. Moreover, the subsidy price is set at no higher than 580 baht/ton (ex-factory price) between MY 2004-2008. The current subsidy price for MY 2004 is tentatively at 478 baht/ton, far below production cost, due mainly to depressed global prices, which are a key factor in determining the RTG subsidy price.

In MY 2004, sugarcane production is revised downward to 66 million metric tons, down significantly from the record 74.1 million metric tons of the previous year, due to drought. The Northeastern region, covering about 40 percent of total production, was adversely affected by drought. Average cane yield is expected to decline sharply from the previous year’s average of 64.8 tons/hectare. However, the proportion of burned cane reportedly contracted to 38 percent of total harvested cane, as compared to 52 percent in the previous year. Thai farmers often burn the sugarcane fields prior to harvest, which makes the cane easier to gather during harvesting.

1.2 Consumption

All sugarcane is currently used as the raw material in sugar mills. The RTG is starting to encourage the use of cane for ethanol production, but this new policy is still under development. At present, the average extraction rate of cane for sugar is reportedly at 107.3 kgs/ton of cane, up significantly from 98.36 kgs/ton of cane in the previous year. Also, the average Cane Commercial Sugar (CCS) increased to 12.0 percent, compared to 11.2 percent in the previous year. The improvement in average extraction rate and average CCS reflected the reduction in proportion of burnt cane and improvements in the cane handling system from the fields to the mills.

1.3 Policy

The government is attempting to limit the financial assistance to cane growers. Depressed world prices have been driving up the amount of financial assistance the RTG must pay. The five-year plan, to start in MY 2004, will provide financial assistance via the subsidy price, which is set at no more than 580 baht/ton (ex-factory price), only on the first 65 million metric tons of cane production. Any production after this amount receives no subsidy payment. In MY 2004 the subsidy price is initially set at 478 baht/tons, as compared to the market price of 330 baht/ton. The amount of cane eligible for the subsidy price for each cane grower depends on the growers' average production level over the past 3 years. All cane growers, around 700,000 growers, will be registered and are required to limit their planted area. Moreover, RTG authorities will set standards in cane quality and efficiency in sugar production for cane growers and sugar millers. Financial assistance will be reduced for those who do not reach the new standards, which include the proportion of burnt cane (no more than 20 percent) and residuals (no more than 3 percent). Also, the sugarcane cultivation zone is set at a 100 km limit around sugar mills. Also, the efficiency of sugar mills is targeted at an average extraction rate of no less than 105 kg/ton of cane.

The RTG has started to focus on the alternative use of sugarcane as a raw material for ethanol production. At present, ethanol is being promoted to replace imported Methyl Tertiary Butyl Ether (MTBE) in gasoline. Recently, the government has liberalized the ethanol industry, leading to an expansion in ethanol production, in particular that of tapioca-based ethanol. According to the government target, demand for ethanol should reach 1 million liter/day by CY 2006 and expand to 2 million liter/day by 2008, given the daily demand for gasoline at 20 million liters. At present, there is reportedly only one tapioca-based ethanol producer in Thailand (as of October 2003), supplying 10,000 liter/day for blending with gasoline. However, trade sources reported that it would take some time for full scale, sugar-based ethanol production, as the government policy has yet to be fully determined, particularly on the benefit sharing system for the cane growers for sugar and ethanol production.

2. Sugar

PSD Table

Country Thailand

Commodity Centrifugal Sugar (1000 MT)

	2003 Revised		2004 Estimate		2005 Forecast	
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		12/2002		12/2003		12/2004
Beginning Stocks	979	979	1282	1282	1182	982
Beet Sugar Production	0	0	0	0	0	0
Cane Sugar Production	7303	7303	7690	6900	0	6800
TOTAL Sugar Production	7303	7303	7690	6900	0	6800
Raw Imports	0	0	0	0	0	0
Refined Imp.(Raw Val)	0	0	0	0	0	0
TOTAL Imports	0	0	0	0	0	0
TOTAL SUPPLY	8282	8282	8972	8182	1182	7782
Raw Exports	2800	2800	3180	2850	0	2750
Refined Exp.(Raw Val)	2300	2300	2620	2400	0	2250
TOTAL EXPORTS	5100	5100	5800	5250	0	5000
Human Dom. Consumption	1900	1900	1990	1950	0	2000
Other Disappearance	0	0	0	0	0	0
Total Disappearance	1900	1900	1990	1950	0	2000
Ending Stocks	1282	1282	1182	982	0	782
TOTAL DISTRIBUTION	8282	8282	8972	8182	0	7782

2.1 Production

MY 2005 sugar output is forecast to continue a downward trend in response to the revised government policy on cane production. However, sucrose content will likely increase slightly in anticipation from the improvements in cane quality and the cane handling system. In MY 2004, sugar production is revised downward to 6.9 million metric tons, down significantly from the record 7.3 million metric tons of the previous year. However, sucrose content is forecast to increase due mainly to the reduction in the proportion of burnt cane. The allocation of sugar production remains unchanged, including Quota A in the amount of 1.92 million metric tons of plantation white sugar for domestic consumption (compared to 1.90 million metric tons in MY2003); Quota B in the amount of 800,000 tons of raw sugar to cover long term export contracts; and Quota C (the balance) for export to the international market. The government still required that mills must give priority to the production of plantation white sugar for the local market, and raw sugar for Quota B, over sugar for export under Quota C (both white and raw sugars).

2.2 Consumption

MY 2004 and 2005 sugar consumption should continue to increase in line with the country's economic expansion. The official estimate of per capita sugar consumption is 27 kgs., of which 9 kgs. are direct consumption and 18 kgs. are indirect consumption via food and beverages. In CY 2003, domestic consumption of sugar increase significantly to 1.94 million metric tons, of which 1.33 million tons were direct household consumption, accounting for about 68 percent of total domestic consumption. The balance was for industrial consumption, about 13 percent for the beverage industry, 9 percent for food industry, 7 percent for dairy products, and the remainder for pharmaceutical uses.

Current domestic prices of sugar remain unchanged at 11.77 baht/kg for wholesale, and 13.25 baht/kg for retail, despite strong political pressures to raise prices by 2 baht/kg in order to settle the huge debt burden of the state-run Cane and Sugar Fund. However, the wholesale price of molasses is reportedly expected to increase significantly from the previous year's average of 1,600 baht/ton (roughly $40/ton) due to higher extraction rate-triggered lower yield of molasses, which is currently at 43.62 kg/ton of cane, as compared to 47.74 kg/ton of cane of the previous year.

2.3 Stock

MY 2005 stocks should continue to decrease, due to the reduction in cane production. In MY 2004, stocks of sugar are revised down to 982 metric tons, down sharply from the previous year, due mainly to the contraction in cane production.

2.4 Trade

Export Trade Matrix

Country Thailand

Commodit Centrifugal Sugar

Time Period	Jan. - Dec.	Units:	MTRV
Exports for:	2002		**2003**
U.S.	14614	U.S.	14615
Others		Others	
Indonesia	1004136	Indonesia	1117263
Japan	383685	Japan	523506
China	182936	China	186386
Malaysia	369884	Malaysia	394325
Korea, Rep.	136344	Korea, Rep.	205511
Cambodia	244344	Cambodia	95520
Taiwan	102794	Taiwan	250245
Russia	491046	Russia	713886
Singapore	158554	Singapore	65173
Sri Lanka	104465	Sri Lanka	74448
Total for Others	3178188		3626263
Others not Liste	965633		1231046
Grand Total	4158435		4871924

Note: The figures for CY 2003 are exports for the period of Jan. - Oct.

In MY 2005, sugar exports should be limited by anticipated smaller cane production. Also, the exportable supply of sugar in MY 2004 is revised downward, as cane production has been adversely affected by drought, but sugar exports are forecast to grow well at around 5.3 million metric tons, up from the previous year. Also, export prices should increase, due to drought-reduced cane production of the other major sugar producers, including India, China, and Australia. At present, export prices are reportedly around U.S. 8-9 cents/lb (roughly $176-198/ton), as compared to U.S. 5-6 cents/lb (roughly $110-132/ton) in the previous year. As for CY 2003 sugar exports, sugar products are expected to increase significantly due to the excessive exportable supply, following the record cane production of that year. Sugar exports to Indonesia, which is Thailand's largest export market for plantation white and refined sugar continued to grow. Also, exports to Russia, which has become the top buyer of raw sugar, increased considerably for the second consecutive year. Also, raw sugar exports to other major conventional markets like Japan, Malaysia, Korea, and Taiwan increased significantly.

As for sugar imports, the amount imported in MY 2004 and 2005 will likely be insignificant amid an increase in import quota and a reduction in the tariff rate, following the WTO agreement.

2.5 Policy

Thailand has had set an import quota for sugar since 1995, following the WTO agreement, as follows:

Year	Import Quota (Metric Ton)	Tariff Rate (Percent)	
		In-Quota	Out of-Quota
1995	13,105.00	65	103
1996	13,177.78	65	102
1997	13,250.56	65	101
1998	13,323.33	65	100
1999	13,396.11	65	99
2000	13,468.89	65	98
2001	13,541.67	65	97
2002	13,614.44	65	96
2003	13,687.22	65	95
2004	13,760.00	65	94
2005	13,836.00	64	93

Source: Ministry of Commerce

As for financial assistance to sugar exports, the RTG stopped providing packing credits to the sugar industry since 2003, following the WTO agreement on export subsidies. Commercial banks are reportedly more cautious in providing packing credit facilities to the sugar industry, due to the financial risk that might result from the government's new price support system, where only the first 65 million metric tons receive any government payments.

3. Supplementary Tables

Table 1: Thailand's Planted Area of Sugarcane by Region

Unit: Hectare

Region	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03
Northeast	326,203	328,832	330,930	351,641	319,119	400,217	468,984
North	239,239	222,212	211,523	206,863	189,010	219,415	234,710
Central	444,743	392,536	375,078	379,347	368,894	391,537	453,020
South	-	-	-	-	-	-	-
Country Total	1,010,184	943,580	917,532	937,852	877,023	1,011,169	1,139,289

Source: Office of Agricultural Economics, Ministry of Agricultural and Cooperatives

Table 2: Thailand's Sugarcane Production by Region

Unit: Metric Ton

Region	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03
Northeast	17,782,489	15,353,041	18,859,249	19,439,101	18,153,103	24,020,428	32,469,396
North	13,372,021	10,258,143	11,391,153	11,946,037	10,391,682	12,863,333	15,652,206
Central	25,239,428	17,854,351	20,081,165	21,427,704	21,018,101	23,129,216	29,443,186
South	-	-	-	-	-	-	-
Country Total	56,393,938	43,465,535	50,331,567	52,812,842	49,562,886	60,012,977	77,564,789

Source: Office of Agricultural Economics, Ministry of Agricultural and Cooperatives

Table 3: Thailand' Sugarcane Yield by Region

Unit: Kilogram/Hectare

Region/Province	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03
Northeast	54,514	46,690	56,989	61,583	56,885	60,018	69,234
North	55,894	46,164	53,853	58,706	54,980	58,625	66,688
Central	56,751	45,485	53,539	57,411	57,133	59,073	64,993
South	-	-	-	-	-	-	-
Country Total	55,825	46,065	54,855	59,232	56,572	59,350	68,082

Source: Office of Agricultural Economics, Ministry of Agriculture & Cooperatives.

Table 4: Thailand’s Sugar Utilization by Domestic Industry

Unit: Metric Ton

Type of Industry	1995	1996	1997	1998	1999	2000	2001	2002	2003
BEVERAGES									
Refined Sugar	90306	88708	98765	114100	113545	134105	145616	130704	107447
White Sugar	47547	46774	69982	79558	74962	118520	79513	89223	151661
Sub - Total	137853	135482	168747	193658	188507	252625	225129	219927	259108
CAKE & BREAD									
Refined Sugar	44290	46066	57669	13600	11090	5582	4131	5273	6994
White Sugar	1413	1006	15641	8054	9365	7599	2517	3890	5655
Sub - Total	45703	47072	73310	21654	20455	13181	6648	9163	12649
ALCOHOL BASE DRINK									
Refined Sugar	1917	2975	nil	nil	nil	nil	nil	nil	nil
White Sugar	13	1467	nil	nil	nil	nil	nil	nil	nil
Sub - Total	1930	4442	0	0	0	0	0	0	0
FRUIT & FOOD PRODUCTS									
Refined Sugar	23999	26634	36110	66547	82092	57831	56646	54368	63910
White Sugar	15937	20336	32040	145579	164462	135553	84914	103057	106210
Sub - Total	39936	46970	68150	212126	246554	193384	141560	157425	170120
DAIRY PRODUCTS									
Refined Sugar	31462	32239	35069	34310	31330	15874	16218	16790	11094
White Sugar	42419	47686	63134	115761	109301	149528	112715	115520	115917
Sub - Total	73881	79925	98203	150071	140631	165402	128933	132310	127011
CONFECTIONARY PRODUCTS									
Refined Sugar	1001	1829	3882	4047	5593	3982	3395	4604	4889
White Sugar	2818	5501	4731	18567	16071	16526	15294	17255	14694
Sub - Total	3819	7330	8613	22614	21664	20508	18689	21859	19583
PHARMACEUTICAL PRODUCTS & MISCELLANEOUS									
Refined Sugar	35542	53295	77580	102944	84907	38452	30097	22254	21975
White Sugar	1417	1044	2016	3962	3624	11933	7201	2914	5290
Sub - Total	36959	54339	79596	106906	88531	50385	37298	25168	27265

Source: Production and Distribution Administration Center, Office of Cane and Sugar Board

Table 5: Thailand's Average Prices of Domestic Plantation White Sugar and Sugarcane

Calendar Year	Plantation White Sugar Wholesale (Baht/100 kg.)	Retail (Baht/kg.)	Sugarcane Initial (Baht/metric ton)	Actual
1980	1,011	11.65	Nil	650
1981	1,019	11.51	Nil	510
1982	1,075	11.94	350	381
1983	1,091	12.00	421	421
1984	1,162	12.00	395	380
1985	1,097	12.00	330	388
1986	1,099	12.00	375	408
1987	1,097	12.00	405	462
1988	1,098	12.00	450	527
1989	1,098	12.00	460	596
1990	1,099	12.00	460	442
1991	1,099	12.00	399	480
1992	1,099	12.00	420	516
1993	1,099	12.00	490	533
1994	1,099	12.00	520	569
1995	1,099	12.00	500	538
1996	1,099	12.00	500	561
1997	1,099	12.00	600	703
1998	1,100	12.50	500	485
1999	1,100	12.50	450	478
2000	1,177	12.50	600	689
2001	1,177	13.25	530	NA
2002	1,177	13.25	500	NA
2003	1,177	13.25	500	NA

Notes: • The revenue sharing system of 70:30 to cane planters and millers started in 1982/83 when the initial cane price began to be quoted.
• The purchasing cane based on C.C.S. system starts in 1993/94 crushing season with the standard quality of cane at 10 C.C.S.
• Average final cane price has been split into different assessments for different regions since 1996/97.
• The retail price of plantation white sugar has been raised to 13.25 baht/kg since Jun 2, 2000.

Table 6: Thailand's Average Final Price of Sugarcane by Zone (First Applied in 1996/97)

Zone	Number of Sugar Mills	Sugarcane Prices (Baht/Ton) at 10 C.C.						
		1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03
North 1	4	572.12	728.98	495.15	464.63	678.10	531.19	n.a.
North 2	3	535.57	693.97	449.2	464.63	678.10	501.89	n.a.
North 3	1	526.47	654.96	459.43	464.63	678.10	501.89	n.a.
North 4	1	541.77	698.18	483.43	464.63	678.10	529.99	n.a.
North 5	1	526.25	692.21	454.78	464.63	678.10	529.99	n.a.
Central 1	1	514.65	650.69	478.49	464.63	678.10	529.99	n.a.
Central 2	1	551.82	700.16	499.91	464.63	678.10	529.99	n.a.
Central 3	2	564.93	675.04	464.7	464.63	706.85	514.64	n.a.
Central 4	14	567.05	701.69	493.44	483.86	633.00	530.46	n.a.
Central 5	1	538.81	640.02	478.44	486.23	680.00	548.43	n.a.
East	5	556.66	683.82	488.28	490.80	697.38	541.30	n.a.
Northeast	12	575.29	715.26	488.37	482.28	685.04	537.71	n.a.

Note: Average Final Prices of Sugarcane by Zone was firstly applied in 1996/97.
Cane price is divided into five zones in 1999/00 crushing season.
Cane price is divided into five zones in 1999/00 crushing season. North 1-5 share the same price in zone 1 of 10 mills plus 4 mills in Central 1-3; Central 4 cover 14 mills in zone 2; Central 5 cover only one mill in zone 3 while there has been no changes in the East (zone 4) and Northeast (zone 5).
Average prices of cane are re-arranged again in 2000/01 for 6 zones:
Zone 1 covers 14 mills;
Zone 2 covers 13 mills;
Zone 3 covers 1 mill which is Suphanburi sugar mill in central plain;
Zone 4 covers 1 mills in central plain;
Zone 5 covers 5 mills in the East;
Zone 6 covers 12 mills in the Northeast.

SOURCE: Office of The Cane and Sugar Board, Ministry of Industry.

Table 7: Thailand's Monthly Export Price (FOB) for Raw Sugar (Baht/Ton)

Month	1995	1996	1997	1998	1999	2000	2001	2002	2003
January	7059	6652	6700	13936	6931	4917	9934	6820.48	6340.14
February	7363	6796	6679	11263	6923	4973	9713	6910.38	7014.30
March	7127	6595	6580	10826	6828	4569	9102	6268.92	7101.11
April	7235	6487	6634	10372	6128	4763	9321	6407.79	7044.62
May	7289	6510	6598	10306	5506	5293	9546	6193.97	6948.47
June	7746	7019	6711	10459	5173	5912	9428	6323.02	7349.54
July	7697	7055	8081	11400	5288	5061	9542	6442.47	6463.61
August	7661	7574	8388	10514	6146	7458	10044	6503.68	6652.75
September	7839	7537	9254	9013	5242	7535	9617	6781.71	6788.60
October	7738	7954	9780	7728	5636	8391	9228	6702.29	6426.80
November	7431	7384	9676	7839	5558	9602	7514	6329.84	n.a.
December	7221	6347	12197	10109	4873	8041	7518	5808.07	n.a.
Average	7439	6686	7195	10361	5842	5863	9368	6414.59	n.a.

SOURCE: Thailand Sugar Corp., Ltd. (TSC),
The Sugar Trading Corp., Ltd. (TSTC),
Siam Sugar Export Corporation (SSEC),
The Sugar Industry Trading Co., Ltd. (SITCO),
K. S. L. Export Trading Co., Ltd. (KSL),
Pacific Sugar Corp., Ltd. (PSC).

Table 8: Thailand's Monthly Export Price (FOB) for Plantation White Sugar (Baht/Ton)

Month	1995	1996	1997	1998	1999	2000	2001	2002	2003
January	7528	7842	7599	15342	8698	6453	10245	8850.89	8582.16
February	7674	7730	7916	13781	7038	6161	10227	8578.14	8128.79
March	8100	7576	8017	12618	8731	6056	9927	8141.91	8361.53
April	8443	7902	7986	11700	8084	6321	9791	8323.85	8529.75
May	8065	7835	8333	11660	7701	6868	9972	7970.58	8553.93
June	8583	8270	7997	11731	7135	6698	10309	7714.38	8318.48
July	8619	7994	8703	11153	6894	7220	10794	8181.73	7976.69
August	8673	7959	10303	11482	7497	7421	11033	7741.88	7914.07
September	8490	8385	10431	11217	6928	7904	10897	8393.23	7778.40
October	8304	8980	11193	10498	7673	8943	10091	8750.83	7068.22
November	8301	8799	12248	7358	7300	9617	10359	9045.72	n.a.
December	9308	8601	14905	9071	7497	9706	10658	8829.76	n.a.
Average	8335	7882	8777	12527	7632	7283	10260	8262.41	n.a.

SOURCE: Thailand Sugar Corp., Ltd. (TSC),
The Sugar Trading Corp., Ltd. (TSTC),
Siam Sugar Export Corporation (SSEC),
The Sugar Industry Trading Co., Ltd. (SITCO),
K. S. L. Export Trading Co., Ltd. (KSL),
Pacific Sugar Corp., Ltd. (PSC).

Table 9: Thailand’s Annual Raw Sugar Exports (MTRV)

Destination	1995	1996	1997	1998	1999	2000	2001	2002	2003 (Jan. - Oct.)
China	1236453	500526	233932	85609	33858	90801	346979	168982	166304
Congo	---	---	---	---	---	10260	-	-	-
Indonesia	---	54378	160005	25804	341700	447543	402189	387971	347019
Iran	---	28728	---	---	---	-	-	30780	-
Japan	530636	737457	703729	697216	529302	746735	690220	383685	523506
Korea, DPR	---	---	---	---	3386	14056	-	6378	62569
Korea, Rep. of	378943	623209	710402	163560	205301	318056	235919	110044	156400
Malaysia	291891	367924	382698	84251	127470	233107	247957	240636	237668
Mozambique	13338	2052	23598	15185	---	-	-	-	-
Philippines	113917	223843	11286	134714	117547	21546	-	3078	-
Romania	---	25650	---	---	12312	-	-	-	41040
Russia	42169	44118	85158	77976	469087	291589	73955	484253	696757
Singapore	8208	83106	43092	7182	17750	8161	26081	52644	2786
Sri Lanka	73564	57559	47093	12312	78007	73462	52839	64384	51993
Tanzania	20520	35223	2052	18981	---	29959	47145	33006	8331
Taiwan	---	---	---	---	---	49248	71795	102794	198994
Ukraine	39769	14364	28728	---	---	-	-	-	-
United States	16539	32740	28284	21082	15111	14615	11597	14614	14615
UAE	---	72254	34474	6156	---	-	-	45785	-
Vietnam	44118	15390	31550	---	14334	-	16416	-	-
Others	43495	41389	38569	73027	9537	5870	15942	20075	72224
Total	2853560	2959910	2564650	1423055	1974702	2355008	2239034	2149107.8	2580206

SOURCE: TSC, TSTC, SSEC, SITCO, K.S.L., PSC and TISS.

Table 10: Thailand's Annual White and Refined Sugar Exports (MTRV)

Destination	1995	1996	1997	1998	1999	2000	2001	2002	2003 (Jan. - Oct.)
Bangladesh	---	---	25358	-	41555	115759	36484	31717	98005
Brunei	---	3210	---	3210	4280	2140	5374	7490	292
Burma	1035	5175	---	-	3601	47326	362	80	155
Cambodia	22276	38411	55430	62873	157702	77029	178405	244344	95520
China	225499	---	2070	3780	-	4850	64751	13954	20081
India	---	---	25470	13973	281555	8280	-	-	348
Indonesia	332064	632468	1133846	752807	493278	834949	399476	616165	770244
Iran	112350	329560	118580	-	74921	6624	-	63368	14445
Jordan	---	44380	---	-	23214	-	4280	55961	46042
Korea, DPR	8073	20364	---	28134	52892	65114	35713	46073	75800
Korea, Rep o	2277	---	---	-	65	3815	20234	26300	49111
Kenya	---	22819	15525	2381	-	2795	-	1074	4036
Laos	12295	11412	16849	14973	20445	17334	39310	27899	20171
Malaysia	---	---	---	3105	11980	48738	87055	129248	156657
Maldives	---	3105	---	-	-	2070	-	-	-
Pakistan	---	29725	92616	-	-	148355	-	-	-
Philippines	77401	126151	---	21444	5843	42350	6596	31168	40308
Russia	2675	2140	---	-	-	-	-	6793	17129
Saudi Arabia	42881	34890	---	-	-	-	-	4280	5350
Singapore	4863	8455	15502	6111	33768	16945	37492	105910	62387
Somalia	3726	4280	---	-	2070	59597	69138	75555	55004
Sri Lanka	20314	34007	32245	6210	24737	115304	5175	40081	22455
Syria	---	27820	---	-	-	-	-	119379	234129
Tanzania	---	10455	29187	26703	6210	6893	5175	23039	22541
UAE	22656	59449	25680	-	4165	-	-	3210	5280
Vietnam	68116	2087	19053	8280	-	471	49740	-	-
Yemen	8570	89658	---	-	60379	217073	16560	52890	165184
Others	6229	28005	34985	9212	56309	8585	10405	283349	311044
Total	973300	1568026	1642396	963196	1358969	1852396	1071725	2009327	2291718

SOURCE: TSC, TSTC, SSEC, SITCO, K.S.L., PSC and TISS.

Table 11: Thailand's Average Quality of Cane Measured by C.C.S

Year	North	Central	East	Northeast	Average
1977/78	9.99	9.65	10.09	11.6	9.85
1978/79	10.2	10.47	10.23	11.22	10.38
1979/80	10.3	9.43	10.82	10.63	9.74
1980/81	9.58	9.49	9.72	10.91	9.63
1981/82	9.85	9.94	9.97	10.58	9.97
1982/83	10.01	10.31	10.01	11.33	10.32
1983/84	9.95	10.45	10.12	11.88	10.47
1984/85	10.57	10.26	10.77	11.87	10.59
1985/86	10.27	10.8	10.59	11.79	10.82
1986/87	10.65	10.53	10.49	11.6	10.66
1987/88	9.97	9.67	9.58	11.43	9.98
1988/89	10.66	10.63	10.67	11.67	10.8
1989/90	10.46	10.18	10.44	11.23	10.46
1990/91	10.8	9.79	9.92	10.95	10.18
1991/92	11.22	10.54	10.65	11.63	10.91
1992/93 1/	11.66	11.05	11.9	12.58	11.6
1992/93	11.74	11.1	11.79	12.4	11.58
1993/94	11.35	10.98	11.09	11.95	11.3
1994/95	11.87	11.45	11.45	12.15	11.76
1995/96	11.37	11.61	11.69	12.47	11.84
1996/97	11.36	11.54	11.39	12.52	11.79
1997/98	10.98	10.2	10.73	11.89	11.11
1998/99	11.32	10.97	11.15	12.56	11.66
1999/00	11.41	11.07	11.29	12.16	11.7
2000/01	11.61	11.26	11.25	12.01	11.62
2001/02	11.61	11.33	11.32	11.15	11.78
2002/03	11.09	10.53	10.56	11.79	11.17

1/ The first year that Office of the Cane & Sugar Board did the research and reported C.C.S. of cane which previously done by the sugar mills.
Source: Office of The Cane and Sugar Board, Ministry of Industry.

Table 12: Thailand's Business Tax Rates for Cane and Sugar

Unit: Percent

Year	Sugarcane	Business tax applied for Exp & Local Trd	Export of Raw and White Sugar	Local Trade of White Sugar
			(Actual Collected Taxes)	
1976/77	---	7.7	1.65	7.7
1977/78	---	7.7	1.65	7.7
1978/79	---	7.7	---	7.7
1979/80	0.75	7.7	---	7.7
1980/81	0.75	7.7	3.3	7.7
1981/82	0.75	7.7	1.65	7.7
1982/83	0.75	7.7	1.65	7.7
1983/84	0.75	9.9	1.65	3.3
1984/85	0.75	9.9	1.65	3.3
1985/86	---	9.9	---	---
1986/87	---	9.9	---	---
1987/88	0.75	9.9	---	1.65
1988/89	0.75	9.9	---	1.65
1989/90	0.75	9.9	---	1.65
1990/91	0.75	9.9	4.4	9.9
1991/92	0.75	7.0 1/	---	7.0 1/
1992/93	0.75	0.0 1/	---	7.0 1/
1993/94	0.75	0.0 1/	---	7.0 1/
1994/95	0.75	0.0 1/	---	7.0 1/
1995/96	0.75	0.0 1/	---	7.0 1/
1996/97	0.75	0.0 1/	---	7.0 1/
1997/98	0.75	0.0 1/	---	10.0 2/
1998/99	0.75	0.0 1/	---	7.0 3/
1999/00	0.75	0.0 1/	---	7.0 3/
2000/01	0.75	0.0 1/	---	7.0 3/
2001/02	0.75	0.0 1/	---	7.0 3/
2002/03	0.75	0.0 1/	---	7.0 3/

1/ The value added tax of 7 percent became effective on January 1, 1992 and applied only to domestic sales, it does not apply to exports.
2/ The government revised the value added tax from 7 to 10 percent on August 10, 1997.
3/ The value added tax has brought back to 7 percent since Apr 1, 1999.

Source: Office of Cane & Sugar Board, Ministry of Industry.